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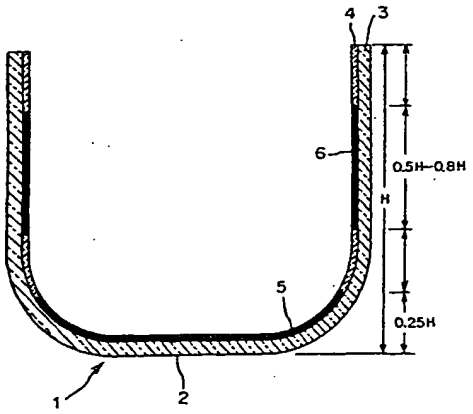
(54) Title: QUARTZ GLASS CRUCIBLE FOR PULLING UP SILICON SINGLE CRYSTAL AND METHOD FOR PRODUCING THE SAME



(57) Abstract: An object of the invention is to provide a quartz glass crucible reduced in the generation of vibration occurring on the surface of a silicon melt and free from the generation of rough surface and cristobalite spots, yet capable of pulling up single crystal silicon stably and at high yield even in long-term operations; it is also an object to provide a method for producing the same. In a quartz glass crucible for pulling up single crystal silicon comprising a crucible base body having a bottom part and a straight shell part with an inner layer provided to the inner surface thereof, the quartz glass crucible is characterized by that said inner layer comprises a synthetic quartz glass layer from the lowest end to at least a height of 0.25H; a naturally occurring quartz glass layer or a mixed layer of naturally occurring quartz glass and synthetic quartz glass extended in a range of from at least 0.5H to 0.8H; and one selected from a synthetic quartz glass layer, a naturally occurring quartz glass layer, and a mixed quartz glass layer of naturally and synthetic quartz glass for the rest of the inner layer; wherein H represents the height from the lowest end of the bottom part to the upper end plane of the shell part. It also provides a method for producing the quartz glass crucible above.

WO 2004/013384 A1